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What is claimed is:

1. A method for internal fixation of the spine comprising the steps of:

- a) inserting a guide pin into a pedicle of at least two vertebrae to be instrumented for internal fixation;
- b) making an incision in the skin at the entry site for each guide pin;
- c) dissecting subcutaneous suprafascial tissue between each entry site;
- d) initially advancing a bone screw over each guide pin through each incision and into each pedicle, the bone screw having bone engaging threads and machine threads for engaging a nut;
- e) elevating the skin between each entry site;
- f) inserting a fixation plate into the subcutaneous suprafascial space and supporting the plate on and between at least two bone screws with the machine threaded portion projecting above the plate; and
- g) clamping the fixation plate to the bone screws using nuts engaging the machine threaded portions of the bone screws with the fixation plate supported above the fascia and muscle tissue but beneath the skin of the patient.

2. The method for internal fixation of the spine of claim 1, further comprising the following steps between the plate insertion and clamping steps:

- loosely engaging a nut on the nut threaded portion of each of the bone screws; and
- further advancing each bone screw deeper into the respective pedicle until the fixation plate lies immediately adjacent the fascia.

3. The method for internal fixation of the spine of claim 1, wherein:

each of the steps (a)-(g) is repeated on opposite sides of the spinous process for bilateral instrumentation of each pedicle of each vertebrae.

4. The method for internal fixation of the spine of claim 3, further comprising the steps of:

dissecting subcutaneous suprafascial tissue between the ipsilateral and contralateral bone screws at each level of instrumentation of the vertebrae; and

after the step of inserting the fixation plate, inserting a linking member between bilateral bone screws at the same level of instrumentation with the machine threaded portion of the bone screws projecting above the linking member.

5. The method for internal fixation of the spine of claim 1, wherein the step of advancing the bone screw includes the steps of:

advancing a cannulated drill bit over each guide pin; and

using the drill bit, drilling into the pedicle to a predetermined depth less than the length of the bone engaging threads of the bone screw.

6. The method for internal fixation of the spine of claim 5, wherein:

in the drilling step the predetermined depth is about one-third of the pedicle depth; and

in the step of initially advancing the bone screw, the bone screw is advanced into at least one-half of the pedicle depth.

7. The method for internal fixation of the spine of claim 1, wherein the step of advancing the bone screw includes the steps of:

dilating the tissue at each entry site using three dilators having successively larger diameters;

removing the smallest dilator;

advancing a cannulated drill bit over each guide pin through an intermediate dilator; and

using the drill bit, drilling into the pedicle to a predetermined depth less than the length of the bone engaging threads of the bone screw.

8. The method for internal fixation of the spine of claim 7, wherein the step of advancing the bone screw further includes the subsequent steps of:

removing the intermediate dilator, leaving the largest diameter dilator; and

advancing the bone screw over the guide pin and through the largest dilator.

9. A method for percutaneously resecting the nucleus of a spinal disc, comprising the steps of:

a) introducing a pair of cannulae bilaterally into the disc space of the affected disc;

b) perforating the disc annulus at each cannula insertion site;

c) inserting a cutting instrument into one cannula and a viewing instrument into the other cannula;

d) resecting the disc nuclear material through the one cannula under direct vision through the other cannula;

e) transposing the cutting instrument and viewing instrument between cannulae and resecting the remaining disc nuclear material through the other cannula.

10. The method for percutaneously resecting the nucleus of a spinal disc of claim 9, wherein, in the step of introducing the pair of cannulae the entry points for the cannulae are nominally ten centimeters bilaterally from the midline of the spinous process and the cannulae are introduced below the transverse processes of the adjacent vertebra.

11. The method for percutaneously resecting the nucleus of a spinal disc of claim 9, further comprising the step of verifying the anatomy under each cannulae using a visualization scope prior to perforating the disc annulus.

12. The method for percutaneously resecting the nucleus of a spinal disc of claim 9, wherein the step of resecting the disc material includes terminating resection through the one cannula when the cutting instrument can be seen under direct vision through the other cannula.

13. The method for percutaneously resecting the nucleus of a spinal disc of claim 9, wherein the step of resecting the disc material includes ablating the disc end plates using an ablating instrument introduced through the cannula.

14. A method for introducing bone graft material into an intervertebral disc space comprising the steps of:

- a) creating bilateral cannulated portals into an affected disc;
- b) removing the nucleus of the disc;
- c) inserting a viewing instrument into the first portal;
- d) introducing bone graft material into the second portal;
- e) advancing the graft material through the second portal into the empty disc space; and
- f) verifying the entry of the graft material through the viewing instrument in the first portal.

15. The method for introducing bone graft material into an intervertebral disc space of claim 14, wherein the step of advancing the graft material includes using an obturator to push the material through the portal into the empty disc space.

16. The method for introducing bone graft material into an intervertebral disc space of claim 14, comprising the additional subsequent steps of:

- g) removing the viewing instrument from the first portal; and
- h) advancing graft material through the first portal into the disc space.

17. A bone screw for internal fixation of the spine, comprising:

a distal threaded shank having threads for engagement within a vertebra;

a proximal threaded stem having machine threads for engagement with a threaded nut; and

a smooth shank intermediate said threaded shank and said threaded stem, said smooth shank having a hub near said threaded stem, said hub defining a support surface for supporting a fixation plate engaged to the bone screw over said proximal stem,

wherein said smooth shank has a length from said threaded shank to said hub that is approximately equal to distance from the pedicle to the the muscle fascia of a patient, so that said hub is situated above the muscle fascia when said distal threaded shank is engaged in a vertebra of the patient.

18. A three component dilator system for use in implantation of a bone screw into a vertebra, comprising:

a first tubular dilator having a tapered end, a first length and a first diameter;

a second tubular dilator having a tapered end, a second length and a second diameter;

a third tubular dilator having a tapered end, a third length and a third diameter;

wherein said first diameter is greater than said second diameter which is greater than said third diameter, and

wherein said first length is shorter than said second length which is shorter than said third length.

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